

CITY OF WORCESTER DPW HEATING SYSTEM UPGRADE 29 ALBANY STREET

OCTOBER 15, 2025



200 Brickstone Square,
Andover, MA 01810-1488
T. 978-296-6200
F. 978-296-6201
W. www.nv5.com

#181231/Project/2025/05-200094 - Worcester 29 Albany St. Design/Issue/00 - Drawing/00/01 - Cover/05-200094-1102-0108 3/15/25 10:17 AM [100] October 06, 2025 - 11:24 AM Mechanical

DPW
29 ALBANY STREET
WORCESTER, MA 01604

LOCALITY MAP



INDEX OF DRAWINGS

T100	COVER SHEET
M001	MECHANICAL LEGEND, NOTE, SYMBOLS AND ABBREVIATIONS
MD201	MECHANICAL PIPING DEMO PLAN
M201	MECHANICAL PIPING PLAN
E001	ELECTRICAL LEGEND, ABBREVIATIONS AND GENERAL NOTES
ED101	ELECTRICAL POWER DEMO PLAN
E101	ELECTRICAL POWER PLAN

STAMP

**100%
BID SET**
07/01/2025

CLIENT

CONSULTANT

PROJECT NAME

CITY OF WORCESTER
HEATING
SYSTEM
UPGRADE
29 ALBANY ST.

Worcester, MA

KEY PLAN

REVISION/ISSUANCE

#	DESCRIPTION	DATE

PROJECT NO.: 25-00094

DESIGNED BY: DCS

CHECKED BY: CH

DATE: 10.15.2025

SCALE: NTS

SHEET NAME

COVER SHEET

SHEET NUMBER

T001

Copyright © 2025 by N|V|5 Engineering, Inc. All rights reserved. No part of this document may be reproduced or transmitted in any form or by any means electronic or mechanical, including photocopying, recording, or by any information storage and retrieval system, without the prior written consent of N|V|5 Engineering, Inc.

- NOTES:**
- REFER TO DRAWING E001 FOR LEGEND, SYMBOLS AND GENERAL NOTES.
 - REFER TO MECHANICAL DRAWINGS FOR ASSOCIATED NOTES, DETAILS, AND EXACT LOCATIONS OF ALL DEVICES.
 - CIRCUIT NUMBERS DENOTE CIRCUITING INTENT. EXACT NUMBER DESIGNATIONS SHALL BE DETERMINED IN THE FIELD AND REFLECTED ON THE AS BUILT DRAWINGS. INTERCONNECTING BRANCH WIRING SHALL BE SIZED EQUAL TO THE HOMERUN UNLESS NOTED OTHERWISE.
 - VOLTAGE DROP HAS BEEN CONSIDERED IN THE DESIGN OF ALL BRANCH CIRCUITRY AND FEEDER SIZES BASED ON EQUIPMENT LAYOUTS AND SHORTEST CONDUCTOR/RACEWAY ROUTING. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR DEVIATIONS TAKEN THAT WILL INCREASE CONDUCTOR/RACEWAY LENGTHS. BRANCH CIRCUITS LONGER THAN 75' FOR 120V FROM PANEL TO LAST OUTLET SHALL BE INCREASED A MINIMUM OF ONE SIZE ABOVE THAT SPECIFIED TO LIMIT VOLTAGE DROP TO LESS THAN 3%. FEEDERS SHALL FOLLOW SIMILAR GUIDELINES AND BE LIMITED TO A 2% DROP.
 - POWER BRANCH CIRCUITRY SHALL BE INSTALLED IN CONDUIT.
 - MAINTAIN CONTINUITY OF BRANCH CIRCUITRY ASSOCIATED WITH ALL EXISTING POWER DEVICES TO REMAIN.

STAMP

**100%
 BID SET**
 07/01/2025

THE PROFESSIONAL ENGINEER SEAL APPLIED TO THIS SHEET APPLIES ONLY TO THE MATERIAL AND DESIGN SHOWN ON THIS SHEET. ALL CHANGES NOTIFIED BY OTHER DOCUMENTS OR OTHERWISE MADE SHALL NOT BE CONSIDERED PREPARED BY THIS ENGINEER AND THIS ENGINEER IS NOT RESPONSIBLE FOR SUCH CHANGES AND ALL RESPONSIBILITY FOR SUCH CHANGES OF RECORD SHALL REMAIN WITH THE CLIENT.

CLIENT

CONSULTANT

PROJECT NAME

CITY OF WORCESTER
 HEATING SYSTEM
 UPGRADE
 29 ALBANY ST.

Worcester, MA

KEY PLAN



REVISION/ISSUANCE

#	DESCRIPTION	DATE

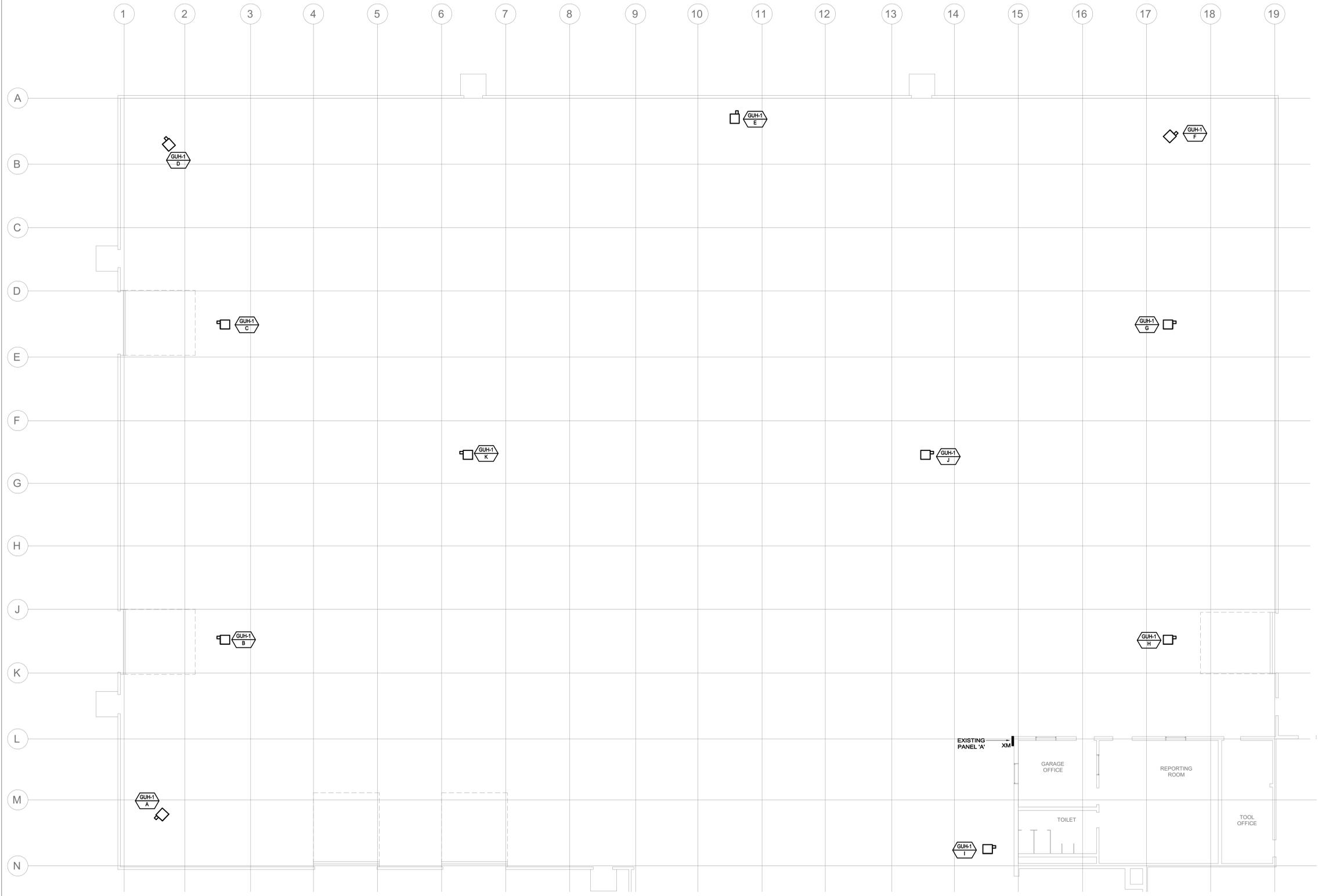
PROJECT NO.: 25-002984
 DESIGNED BY: MMM
 CHECKED BY: JF
 DATE: 10.15.2025
 SCALE: 1/8" = 1'-0"

SHEET NAME

ELECTRICAL
 NEW WORK PLAN

SHEET NUMBER

E101



1 ELECTRICAL NEW WORK PLAN
 E 101 1/8" = 1'-0"



#181231 Project: 2025-05-20:0094 - Worcester 29 Albany St Garage Heat/100 Drawings/2025/05/20/25-002984-E101 ELECTRICAL NEW WORK PLAN.dwg October 06, 2025 - 11:25am hmc@nv5.com

THE PROFESSIONAL ENGINEER SEAL APPLIED TO THIS SHEET APPLIES ONLY TO THE MATERIAL AND DESIGN SHOWN ON THIS SHEET. ALL CHANGES NOTIFIED BY OTHER DOCUMENTS OR OTHERWISE MADE SHALL NOT BE CONSIDERED PREPARED BY THIS ENGINEER AND THIS ENGINEER IS NOT RESPONSIBLE FOR SUCH CHANGES AND ALL RESPONSIBILITY FOR SUCH CHANGES OF RECORD SHALL REMAIN WITH THE CLIENT.

- NOTES:**
1. REFER TO DRAWING E001 FOR LEGEND, SYMBOLS AND DEMOLITION NOTES.
 2. REFER TO MECHANICAL DRAWINGS FOR ASSOCIATED NOTES, DETAILS AND EXACT LOCATIONS OF ALL EQUIPMENT.
 3. MAINTAIN CONTINUITY OF BRANCH CIRCUITRY ASSOCIATED WITH ALL EXISTING POWER DEVICES TO REMAIN.

STAMP

**100%
BID SET**
07/01/2025

CLIENT

CONSULTANT

PROJECT NAME

CITY OF WORCESTER
**HEATING
SYSTEM
UPGRADE**
29 ALBANY ST.

Worcester, MA

KEY PLAN

REVISION/ISSUANCE

#	DESCRIPTION	DATE

PROJECT NO.: 25-000984

DESIGNED BY: MM

CHECKED BY: JF

DATE: 10.15.2025

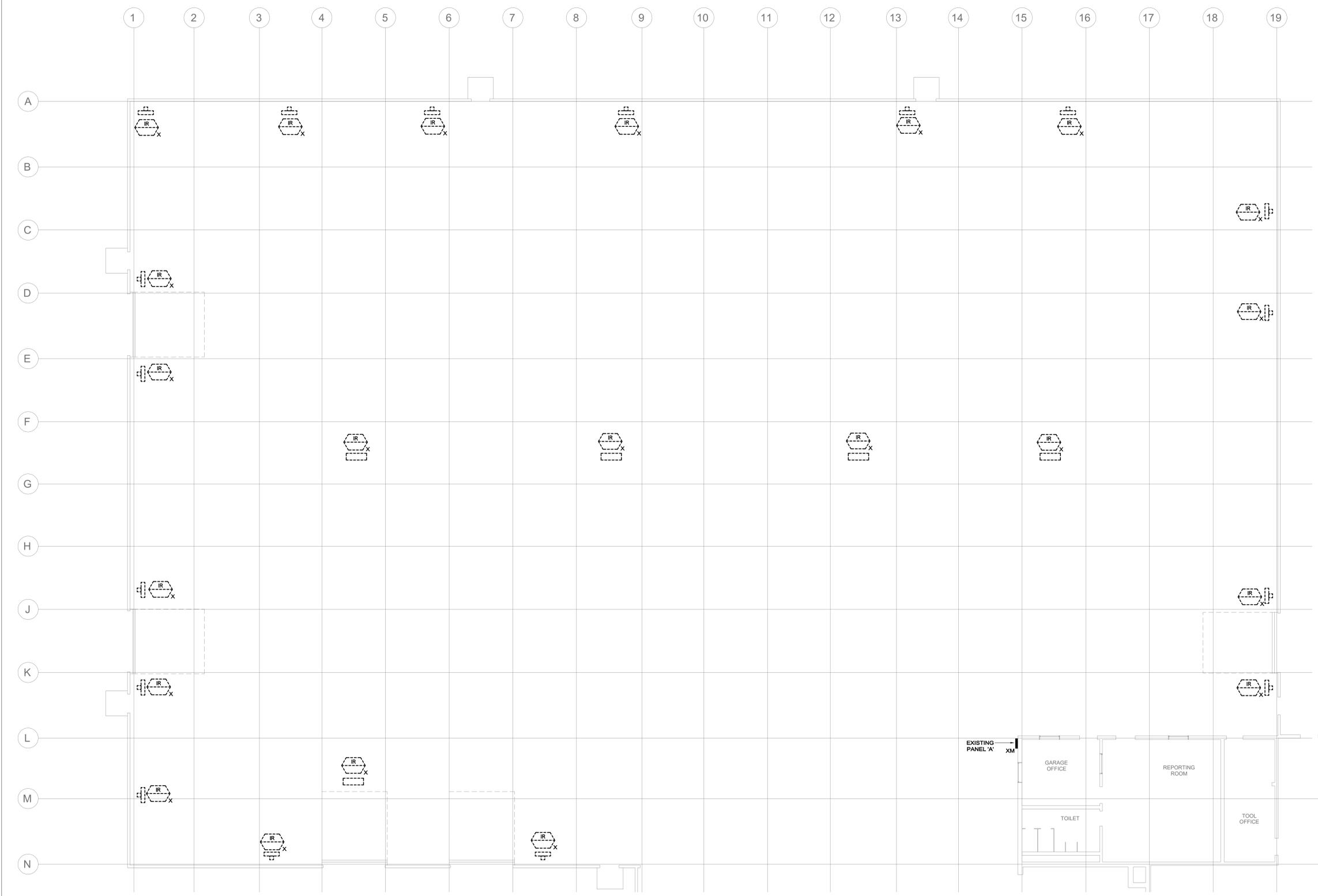
SCALE: 1/8" = 1'-0"

SHEET NAME

**ELECTRICAL
DEMOLITION PLAN**

SHEET NUMBER

ED101



1 ELECTRICAL DEMOLITION PLAN
ED 101 1/8" = 1'-0"



W:\B23\Projects\2025\25-000984 - Worcester 29 Albany St. Garage Heat\100 Demolition\Power\1000 Electrical\Power\1000 Electrical\1001 Electrical\25-000984-ED101 Electrical Demolition Plan.dwg [2025.10.15 11:25am]

THIS DOCUMENT IS THE PROPERTY OF N|V|5 ENGINEERING. IT IS TO BE USED ONLY FOR THE PROJECT AND SITE SPECIFICALLY IDENTIFIED HEREIN. NO PART OF THIS DOCUMENT IS TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN CONSENT OF N|V|5 ENGINEERING.

STAMP

100% BID SET
07/01/2025

CLIENT

CONSULTANT

PROJECT NAME

CITY OF WORCESTER
HEATING SYSTEM UPGRADE
29 ALBANY ST.

Worcester, MA

KEY PLAN

REVISION/ISSUANCE		
#	DESCRIPTION	DATE

PROJECT NO.: 25-002984
DESIGNED BY: DSG
CHECKED BY: CH
DATE: 10.15.2025
SCALE: NTS

SHEET NAME

MECHANICAL LEGEND, NOTES AND ABBREVIATIONS

SHEET NUMBER

M001

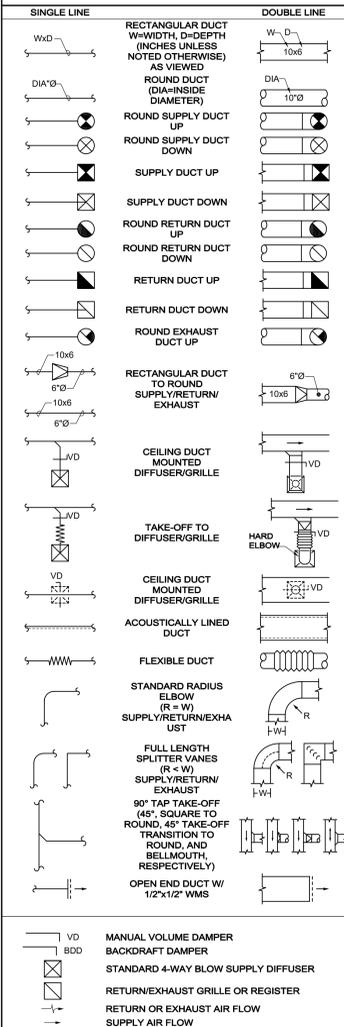
ABBREVIATIONS

GENERAL	NIA	NOT APPLICABLE
A COMPRESSED AIR	NC NORMALLY CLOSED OR NOISE CRITERIA	
AD ACCESS DOOR	NC NOT IN CONTRACT	
ADDL ADDITIONAL	NO NORMALLY OPEN	
AF AIR FOIL	NO NUMBER	
AFF ABOVE FINISHED FLOOR	NOM NOMINAL	
AFR ABOVE FINISHED ROOF	NTA NOT TO SCALE	
ALT ALTITUDE OR ALTERNATE		
AMP AMPERE	OA OUTSIDE AIR	
AP ACCESS PANEL	OA OUTSIDE AIR INTAKE	
APD AIR PRESSURE DROP	OC ON CENTER	
ARCH ARCHITECT	OD OUTSIDE DIAMETER	
AS AIR STREAM	OP OPEN DRIP PROOF	
ATC AUTOMATIC TEMPERATURE CONTROL	OV OUTLET VELOCITY	
ATM ATMOSPHERE		
AVE AVERAGE	PCF POUNDS PER CUBIC FOOT	
BHP BRAKE HORSEPOWER	PD PRESSURE DROP	
BI BACKWARDS INCLINED	PH PHASE	
BLDG BUILDING	PL PLUMBING	
BOO BOTTOM OF DUCT	POS PROVIDED BY OTHER SECTION	
BSMT BASEMENT	PSI POUNDS PER SQUARE INCH	
BTU BRITISH THERMAL UNIT	PSIA POUNDS PER SQUARE INCH ABSOLUTE	
BTUH BTU PER HOUR	PSID POUNDS PER SQUARE INCH DIFFERENTIAL	
	PSIG POUNDS PER SQUARE INCH GAUGE	
	PVC POLYVINYL CHLORIDE	
C TO C CENTER TO CENTER	QTY QUANTITY	
CENT CENTRIFUGAL	R RADIUS	
CF CUBIC FEET	RA RETURN AIR	
CFM CUBIC FEET PER MINUTE	RET RETURN	
CL CENTERLINE	REQD REQUIRED	
CLG CEILING OR COILING	RH RELATIVE HUMIDITY	
CO CARBON MONOXIDE	RLA RUNNING LOAD AMPS	
COL COLUMN	RLM RELIEF	
CONC CONCRETE	RPM REVOLUTIONS PER MINUTE	
CONN CONNECTION	SCH SCHEDULE	
CONTR CONTRACTOR	SCR SCREEN	
D DRAIN OR DEPTH	SCT SATURATED CONDENSING TEMPERATURE	
DB DRY BULB TEMPERATURE	SDET SMOKE DETECTOR	
DEG DEGREE	SEN SENSIBLE	
DDC DIRECT DIGITAL CONTROL	SHC SENSIBLE HEAT CAPACITY	
CL CENTERLINE	SHS STATIC PRESSURE	
CLG CEILING OR COILING	SPECS SPECIFICATIONS	
CO CARBON MONOXIDE	SS SQUARE	
COL COLUMN	SQ SQUARE FEET	
CONC CONCRETE	STL STAINLESS STEEL	
CONN CONNECTION	STL STEEL	
CONTR CONTRACTOR	SUP SUPPLY	
D DRAIN OR DEPTH	T TEMPERATURE	
DB DRY BULB TEMPERATURE	TA THROWAWAY	
DEG DEGREE	TEL TELEPHONE	
DDC DIRECT DIGITAL CONTROL	TEFC TOTALLY ENCLOSED FAN COOLED	
CL CENTERLINE	TEMP TEMPERATURE	
CLG CEILING OR COILING	TSR THERMOSTAT	
CO CARBON MONOXIDE	TST 12,000 BTUH COOLING CAPACITY	
COL COLUMN	TOT TOTAL	
CONC CONCRETE	TYP TYPICAL	
CONN CONNECTION	UC UNDERCUT DOOR	
CONTR CONTRACTOR	V VOLTS (ELECTRICAL)	
D DRAIN OR DEPTH	VEL VELOCITY	
DB DRY BULB TEMPERATURE	W WIDTH OR WATT	
DEG DEGREE	WB WET BULB TEMPERATURE	
DDC DIRECT DIGITAL CONTROL	WC WATER COLUMN	
CL CENTERLINE	WG WATER GAUGE	
CLG CEILING OR COILING	WO WITHOUT	
CO CARBON MONOXIDE	WPD WATER PRESSURE DROP	
COL COLUMN	WTD WATER TEMPERATURE DIFFERENCE	
CONC CONCRETE	X EXISTING EQUIPMENT TO BE REMOVED	
CONN CONNECTION	XM EXISTING EQUIPMENT TO REMAIN	
CONTR CONTRACTOR	XN NEW LOCATION OF RELOCATED EQUIPMENT	
D DRAIN OR DEPTH	XR EXISTING EQUIPMENT TO BE RELOCATED	
DB DRY BULB TEMPERATURE		
DEG DEGREE		
DDC DIRECT DIGITAL CONTROL		
CL CENTERLINE		
CLG CEILING OR COILING		
CO CARBON MONOXIDE		
COL COLUMN		
CONC CONCRETE		
CONN CONNECTION		
CONTR CONTRACTOR		
D DRAIN OR DEPTH		
DB DRY BULB TEMPERATURE		
DEG DEGREE		
DDC DIRECT DIGITAL CONTROL		
CL CENTERLINE		
CLG CEILING OR COILING		
CO CARBON MONOXIDE		
COL COLUMN		
CONC CONCRETE		
CONN CONNECTION		
CONTR CONTRACTOR		
D DRAIN OR DEPTH		
DB DRY BULB TEMPERATURE		
DEG DEGREE		
DDC DIRECT DIGITAL CONTROL		
CL CENTERLINE		
CLG CEILING OR COILING		
CO CARBON MONOXIDE		
COL COLUMN		
CONC CONCRETE		
CONN CONNECTION		
CONTR CONTRACTOR		
D DRAIN OR DEPTH		
DB DRY BULB TEMPERATURE		
DEG DEGREE		
DDC DIRECT DIGITAL CONTROL		
CL CENTERLINE		
CLG CEILING OR COILING		
CO CARBON MONOXIDE		
COL COLUMN		
CONC CONCRETE		
CONN CONNECTION		
CONTR CONTRACTOR		
D DRAIN OR DEPTH		
DB DRY BULB TEMPERATURE		
DEG DEGREE		
DDC DIRECT DIGITAL CONTROL		
CL CENTERLINE		
CLG CEILING OR COILING		
CO CARBON MONOXIDE		
COL COLUMN		
CONC CONCRETE		
CONN CONNECTION		
CONTR CONTRACTOR		
D DRAIN OR DEPTH		
DB DRY BULB TEMPERATURE		
DEG DEGREE		
DDC DIRECT DIGITAL CONTROL		
CL CENTERLINE		
CLG CEILING OR COILING		
CO CARBON MONOXIDE		
COL COLUMN		
CONC CONCRETE		
CONN CONNECTION		
CONTR CONTRACTOR		
D DRAIN OR DEPTH		
DB DRY BULB TEMPERATURE		
DEG DEGREE		
DDC DIRECT DIGITAL CONTROL		
CL CENTERLINE		
CLG CEILING OR COILING		
CO CARBON MONOXIDE		
COL COLUMN		
CONC CONCRETE		
CONN CONNECTION		
CONTR CONTRACTOR		
D DRAIN OR DEPTH		
DB DRY BULB TEMPERATURE		
DEG DEGREE		
DDC DIRECT DIGITAL CONTROL		
CL CENTERLINE		
CLG CEILING OR COILING		
CO CARBON MONOXIDE		
COL COLUMN		
CONC CONCRETE		
CONN CONNECTION		
CONTR CONTRACTOR		
D DRAIN OR DEPTH		
DB DRY BULB TEMPERATURE		
DEG DEGREE		
DDC DIRECT DIGITAL CONTROL		
CL CENTERLINE		
CLG CEILING OR COILING		
CO CARBON MONOXIDE		
COL COLUMN		
CONC CONCRETE		
CONN CONNECTION		
CONTR CONTRACTOR		
D DRAIN OR DEPTH		
DB DRY BULB TEMPERATURE		
DEG DEGREE		
DDC DIRECT DIGITAL CONTROL		
CL CENTERLINE		
CLG CEILING OR COILING		
CO CARBON MONOXIDE		
COL COLUMN		
CONC CONCRETE		
CONN CONNECTION		
CONTR CONTRACTOR		
D DRAIN OR DEPTH		
DB DRY BULB TEMPERATURE		
DEG DEGREE		
DDC DIRECT DIGITAL CONTROL		
CL CENTERLINE		
CLG CEILING OR COILING		
CO CARBON MONOXIDE		
COL COLUMN		
CONC CONCRETE		
CONN CONNECTION		
CONTR CONTRACTOR		
D DRAIN OR DEPTH		
DB DRY BULB TEMPERATURE		
DEG DEGREE		
DDC DIRECT DIGITAL CONTROL		
CL CENTERLINE		
CLG CEILING OR COILING		
CO CARBON MONOXIDE		
COL COLUMN		
CONC CONCRETE		
CONN CONNECTION		
CONTR CONTRACTOR		
D DRAIN OR DEPTH		
DB DRY BULB TEMPERATURE		
DEG DEGREE		
DDC DIRECT DIGITAL CONTROL		
CL CENTERLINE		
CLG CEILING OR COILING		
CO CARBON MONOXIDE		
COL COLUMN		
CONC CONCRETE		
CONN CONNECTION		
CONTR CONTRACTOR		
D DRAIN OR DEPTH		
DB DRY BULB TEMPERATURE		
DEG DEGREE		
DDC DIRECT DIGITAL CONTROL		
CL CENTERLINE		
CLG CEILING OR COILING		
CO CARBON MONOXIDE		
COL COLUMN		
CONC CONCRETE		
CONN CONNECTION		
CONTR CONTRACTOR		
D DRAIN OR DEPTH		
DB DRY BULB TEMPERATURE		
DEG DEGREE		
DDC DIRECT DIGITAL CONTROL		
CL CENTERLINE		
CLG CEILING OR COILING		
CO CARBON MONOXIDE		
COL COLUMN		
CONC CONCRETE		
CONN CONNECTION		
CONTR CONTRACTOR		

HVAC DEMOLITION NOTES

- THE LOCATIONS OF EXISTING EQUIPMENT INCLUDING PIPING, DUCTWORK, EQUIPMENT, CONDUITS, ETC ARE SHOWN IN AN APPROXIMATE WAY ONLY. VISIT THE SITE PRIOR TO SUBMISSION OF THE BIDS AND COMMENCEMENT OF WORK TO BECOME FAMILIAR WITH THE ACTUAL CONDITIONS AND EXTENT OF THE WORK.
- TRACE AND LABEL ALL EXISTING SYSTEMS WITHIN THE DEMOLITION AREA AND BEYOND PRIOR TO DISCONNECTION AND REMOVAL TO ENSURE THAT NO AREA OUTSIDE THE DEMOLITION AREA IS AFFECTED. REVIEW IN DETAIL WITH THE GENERAL CONTRACTOR AND OWNER WHAT IS TO BE REMOVED AND REMAIN PRIOR TO WORK COMMENCING THE DEMOLITION. THERE SHALL BE NO INTERRUPTION OF SERVICES OUTSIDE THE DEMOLITION AREA WITHOUT APPROVAL FROM THE OWNER'S REPRESENTATIVE.
- COORDINATE EQUIPMENT REMOVAL WITH ALL PARTIES TO PROVIDE DISCONNECTION. REMOVE EQUIPMENT BY UNFASTENING AT THE SUPPORTS OR ATTACHMENTS. ALSO REMOVE THE ATTACHMENTS FROM THE BUILDING, LEAVING NO COMPONENT OF THE ORIGINAL INSTALLATION.
- EXERCISE CARE WITH EQUIPMENT THAT IS TO BE RELOCATED OR TURNED OVER TO THE OWNER. EXAMINE THE EQUIPMENT BEFORE REMOVAL IN THE PRESENCE OF THE OWNER'S REPRESENTATIVE TO DETERMINE ITS CONDITION. DELIVER OWNER-RETAINED EQUIPMENT TO AN ON-SITE LOCATION DESIGNATED BY THE OWNER AND OBTAIN ACKNOWLEDGMENT OF RECEIPT IN ORIGINAL CONDITION.
- INSTALL RELOCATED EQUIPMENT IN ORIGINAL CONDITION ENSURING NO DAMAGE.
- PROMPTLY REPAIR ANY DAMAGE CAUSED DURING THE EXECUTION OF WORK. DAMAGE INCLUDES BUT IS NOT LIMITED TO DESTRUCTION OF ITEMS INTENDED TO REMAIN OR TO BE SALVAGED.
- NOTIFY THE OWNER'S REPRESENTATIVE IMMEDIATELY OF ANY UNANTICIPATED HIDDEN CONDITIONS ENCOUNTERED DURING THE DEMOLITION.
- ALL ITEMS REMOVED SHALL BE OFFERED TO THE OWNER FOR SALVAGE. IF THE OWNER DOES NOT TAKE POSSESSION, DISPOSE OF THE ITEMS IN A SAFE AND LEGAL MANNER. ALL ITEMS CLASSIFIED AS HAZARDOUS SHALL BE DISPOSED AS HAZARDOUS WASTES AND A UNIFORM HAZARDOUS WASTE MANIFEST SHALL BE PROVIDED TO THE OWNER.
- ENSURE THE SAFE PASSAGE OF PERSONS IN AND AROUND THE BUILDING DURING DEMOLITION. PREVENT INJURY TO PERSONS AND DAMAGE TO PROPERTY. PROVIDE ADEQUATE SHORING AND BRACING TO PREVENT COLLAPSE. IMMEDIATELY REPAIR DAMAGED PROPERTY TO THE CONDITION BEFORE BEING DAMAGED. TAKE EFFECTIVE MEASURES TO PREVENT WINDBLOWN DUST.
- DO NOT USE CUTTING TORCHES UNTIL WORK AREA IS CLEARED OF FLAMMABLE MATERIALS. AT CONCEALED SPACES, SUCH AS PIPE INTERIORS OR SHAFTS. VERIFY CONDITION AND CONTENTS OF HIDDEN SPACE BEFORE STARTING FLAME-CUTTING OPERATIONS. MAINTAIN FIRE WATCH AND PORTABLE FIRE-SUPPRESSION DEVICES DURING FLAME-CUTTING OPERATIONS. MAINTAIN ADEQUATE VENTILATION WHEN USING CUTTING TORCHES.
- DRAIN, PURGE, OR OTHERWISE REMOVE, COLLECT, AND PROPERLY DISPOSE OF CHEMICALS, LIQUIDS, GASES, EXPLOSIVES, ACIDS, FLAMMABLES, OR OTHER DANGEROUS MATERIALS BEFORE PROCEEDING WITH DEMOLITION OPERATIONS.
- PROPERLY LABEL ALL UNLABELED PIPES THAT REMAIN WITH COLOR PIPE MARKERS AND VALVE TAGS. MOUNT A VALVE AND SERVICE CHART IN THE AREA OF DEMOLITION THAT IDENTIFIES ALL LABELED SERVICES. TURN ONE COPY OF SAME OVER TO THE OWNER.
- ALL DEMOLITION SCOPE ASSOCIATED WITH LOW VOLTAGE WIRING FOR CONTROLS AND ASSOCIATED INTERLOCKS SHALL BE INCLUDED IN THIS CONTRACT.

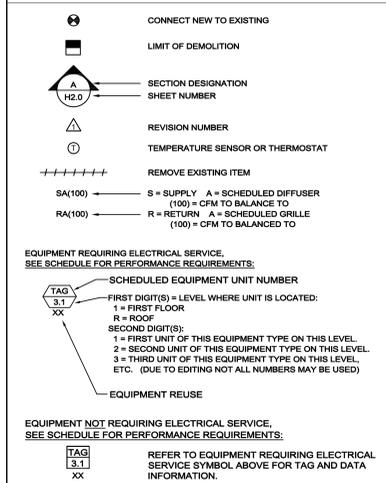
DUCTWORK



CONTROL ABBREVIATIONS

ALM	ALARM
ATC	AUTOMATIC TEMPERATURE CONTROL
DAT	DISCHARGE AIR TEMPERATURE SENSOR
DDC	DIRECT DIGITAL CONTROL
ES	END SWITCH
FA	FAULT ALARM
HOA	HANDS-OFF AUTOMATIC SWITCH
LAT	LEAVING AIR TEMPERATURE SENSOR
S	SWITCH
SP	STATIC PRESSURE SENSOR
SPD	SPEED CONTROL
S/S	START/STOP
T	TEMPERATURE SENSOR/THERMOSTAT
TR	TEMPERATURE SENSOR/THERMOSTAT (ROOM)
VFDS	VARIABLE FREQUENCY DRIVE SPEED
WC	WATER COLUMN
X	REMOVE EXISTING ITEM

CALLOUT SYMBOLS



HVAC GENERAL NOTES

- GENERAL NOTES APPLY TO ALL DRAWINGS.
- THIS PROJECT INVOLVES CONSTRUCTION INSIDE AN EXISTING STRUCTURE. CONTRACTORS, BY SUBMITTING A BID, ARE DEEMED TO BE COMPLETELY FAMILIAR WITH THE EXISTING CONDITION OF THE BUILDING AS IT INFLUENCES THE WORK DESCRIBED. ABSOLUTELY NO CLAIMS FOR EXTRA COMPENSATION WILL BE CONSIDERED FOR EXISTING CONDITIONS VISIBLE OR REASONABLY INFERRABLE FROM A CAREFUL EXAMINATION OF THE EXISTING BUILDING.
- THIS CONTRACTOR SHALL INSPECT THE EXISTING FIELD CONDITIONS AT THE SITE AND THE "AS-BUILT" BASE BUILDING CONTRACT DOCUMENTS PRIOR TO THE START OF ANY WORK TO DETERMINE WHAT EFFECT THE EXISTING CONDITIONS WILL HAVE ON HIS WORK. POTENTIAL PROBLEM AREAS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND/OR ENGINEER IMMEDIATELY.
- THIS CONTRACTOR SHALL CONNECT HIS WORK TO VARIOUS EXISTING PIPING, DUCTWORK, AND CONTROL SYSTEMS IN THE BASE BUILDING. THE NEW WORK SHALL BE COMPATIBLE WITH THE EXISTING SYSTEMS. LOCATION OF EQUIPMENT OR THE ROUTING OF THE VARIOUS SYSTEMS AS WELL AS OPENINGS IN FLOOR SLABS OR WALLS SHALL BE GOVERNED BY THE EXISTING CONDITIONS AS THEY APPEAR IN THE FIELD OR ON THE "AS-BUILT" DRAWINGS.
- CARE SHALL BE TAKEN DURING THE INSTALLATION TO NOT DAMAGE OR INTERRUPT BUILDING SYSTEMS AND SERVICES THAT ARE ALREADY INSTALLED. DAMAGE TO SUCH SYSTEMS OR EQUIPMENT CAUSED BY THIS CONTRACTOR DURING INSTALLATION SHALL BE REPAIRED AND/OR REPLACED AT THIS CONTRACTOR'S EXPENSE TO THE COMPLETE SATISFACTION OF THE BUILDING OWNER.
- SHUTDOWN OF EXISTING SYSTEMS FOR CONNECTION TO EXISTING SERVICES SHALL BE COORDINATED WITH THE CONSTRUCTION MANAGER OR GENERAL CONTRACTOR AND BUILDING OWNER. THIS CONTRACTOR SHALL SUBMIT REQUESTS, WHERE THEY AFFECT THE OPERATION OF THE BUILDING SYSTEMS, AT LEAST ONE WEEK IN ADVANCE OF ANY REQUIRED SHUTDOWN. THE ACTUAL SHUTDOWN PERIOD SHALL BE AS SHORT AS POSSIBLE AND AT A TIME MUTUALLY AGREEABLE TO THE BUILDING OWNER AND THE CONSTRUCTION MANAGER/GENERAL CONTRACTOR.
- DRAWINGS ARE DIAGRAMMATIC, THEREFORE DETERMINE EXACT LOCATIONS OF SYSTEMS AND COMPONENTS IN FIELD.
- ALL WORK SHALL BE COORDINATED WITH ALL TRADES INVOLVED. OFFSETS IN PIPING AND DUCTS (INCLUDING DIVIDED DUCTS) AND TRANSITIONS AROUND OBSTRUCTIONS SHALL BE PROVIDED AT NO ADDITIONAL COST TO THE OWNER.
- VERIFY ALL EQUIPMENT CONNECTIONS WITH MANUFACTURER'S CERTIFIED DRAWINGS. VERIFY AND PROVIDE DUCT AND/OR PIPE TRANSITIONS TO FURNISHED EQUIPMENT. FIELD VERIFY AND COORDINATE ALL DIMENSIONS BEFORE FABRICATION.
- ALL MATERIALS AND EQUIPMENT UNLESS SPECIFICALLY INDICATED AS REUSED, SHALL BE NEW.
- DUCTWORK SHALL NOT RUN ALONG FULL HEIGHT PARTITIONS.
- EXISTING ROOM THERMOSTATS AND SENSORS SHALL BE PROTECTED DURING CONSTRUCTION AND RELOCATED AS INDICATED ON THE DRAWINGS. INSTALL NEW AND RELOCATED ROOM THERMOSTATS AND SENSORS 4 FEET AFF OR AS DIRECTED OTHERWISE BY ARCHITECT.
- WHEN SECTION OF DUCTWORK IS NOT LABELED FOR SIZE, THE LARGER SIZE INDICATED ON THE CONNECTED DUCT SHALL PREVAIL. SIZE OF DUCT RUN-OUTS TO DIFFUSER SHALL EQUAL DIFFUSER NECK SIZE.
- THE FIRE PROOFING OF THE BUILDING STRUCTURE IS NOT TO BE REMOVED FOR THE INSTALLATION OF HANGERS, SUPPORTS, DUCTWORK, ETC. IF FIRE PROOFING IS DAMAGED, IT SHALL BE REPAIRED AT THE EXPENSE OF THE TRADE.
- CONTRACTOR SHALL TEST AND CALIBRATE ALL CONTROLS AND VERIFY ALL ARE FULLY FUNCTIONAL AND SUBMIT DOCUMENTATION. SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
- CONTRACTOR SHALL PROVIDE AND SUBMIT DOCUMENTATION FOR TESTING AND BALANCING OF ALL AIR AND WATER SYSTEMS. DUCT AND PIPING PRESSURE AND LEAKAGE TESTS, OPERATING AND MAINTENANCE MANUALS, AND AS BUILT DRAWINGS. SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
- MANY EQUIPMENT SCHEDULES DO NOT LIST QUANTITIES. CONTRACTOR SHALL REFER TO ALL DRAWINGS AND PROVIDE THE REQUIRED QUANTITIES FOR ALL COMPONENTS.

GAS-FIRED UNIT HEATER SCHEDULE (CFM, MBH)

TAG	LOCATION	TYPE	GAS TYPE	PRESSURE (IN WC)		INPUT (MBH)	OUTPUT (MBH)	MIN. EFFICIENCY (%)	AIR		MOTOR		MANUFACTURER AND MODEL NUMBER (AS STANDARD)	REMARKS		
				MIN	MAX				CFM	DISCHARGE AIR TEMP-RISE (°F)	RPM	HP			V	PH
GFUH-1	SEE PLANS	HANGING	NATURAL	-	14	150	124.5	83	2180	51	-	120	1	-	MODINE - PDF 150	SEE NOTES

- NOTES:
- REFER TO SPECIFICATIONS, DETAILS, AND CONTROL DRAWINGS FOR ADDITIONAL INFORMATION.
 - PROVIDE ALL SUPPORTS AND HANGERS NECESSARY FOR THE INSTALLATION.
 - PRO

